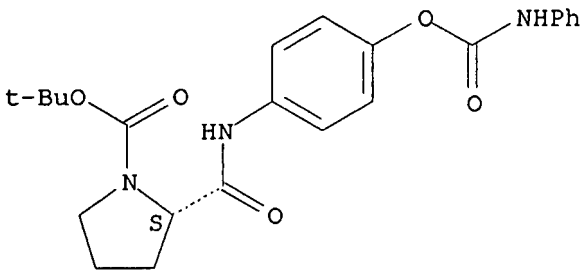
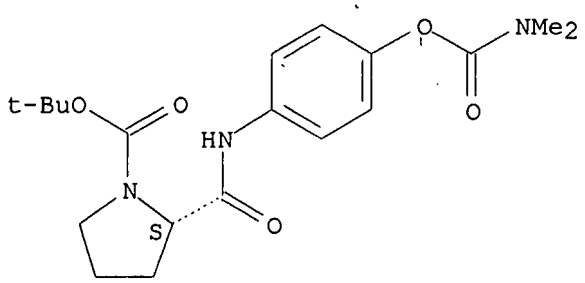
L9 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2002 ACS
AN 1986:460932 CAPLUS
DN 105:60932
TI Peptidyl carbamates incorporating amino acid isosteres as novel elastase inhibitors
AU Digenis, George A.; Agha, Bushra J.; Tsuji, Kiyoshi; Kato, Masayuki; Shinogi, Masaki
CS Coll. Pharm., Univ. Kentucky, Lexington, KY, 40536-0053, USA
SO J. Med. Chem. (1986), 29(8), 1468-76
CODEN: JMCMAR; ISSN: 0022-2623
DT Journal
LA English
OS CASREACT 105:60932
AB Title peptidyl carbamates MeO2CCH2CH2CO-Ala-Ala-Pro-NHZO2CNRR1 [I; Z = p-C6H4, R = H, R1 = Ph, CHMe2; Z = p-C6H4, R = R1 = Me; Z = o-C6H4, CH(CHMe2)CH2, R = H, R1 = Ph] and MeO2CCH2CH2CO-Ala-Ala-Pro-CH2N(CHMe2)COXR2 [II; X = O, R2 = C6H4NO2-p, Ph, C6F5, CH2CF2CF2CF3; X = S, R2 = CH2Ph, 1-methyl-5-tetrazolyl, 1-phenyl-5-tetrazolyl] were prepd. and they were tested as inhibitors of elastase, trypsin, and chymotrypsin. Thus, Boc-Pro-NHZOH (Boc = Me3CO2C) were treated with RR1NCOCl or RR1NCO to give Boc-Pro-NHZO2CNRR1, which were Boc-deblocked and then coupled with MeO2CCH2CH2CO-Ala-Ala-OH (III) by ClCO2CH2CHMe2 to give I. Boc-Pro-CH2Cl was treated with H2NCHMe2 to give Boc-Pro-CH2NHCHMe2, which was treated with R2XCOCl to give Boc-Pro-CH2N(CHMe2)COXR2, which were Boc-deblocked and then coupled with III to give II. Six peptidyl carbamates specifically inhibited elastase without affecting trypsin and chymotrypsin. Kinetic studies showed that the inhibition was competitive. The inhibition is reversible and proceeds via the rapid formation of a strong enzyme-inhibitor complex, followed by slow acylation of the serine residue on the active site of the enzyme.
IT **102284-31-1P 102284-32-2P 102284-33-3P**
102284-34-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and deblocking of)
RN 102284-31-1 CAPLUS
CN 1-Pyrrolidinecarboxylic acid, 2-[[[4-[[(phenylamino)carbonyl]oxy]phenyl]amino]carbonyl]-, 1,1-dimethylethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



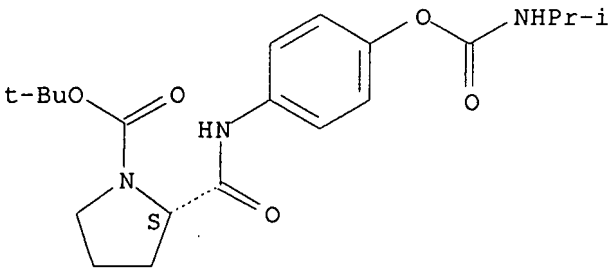
RN 102284-32-2 CAPLUS
CN 1-Pyrrolidinecarboxylic acid, 2-[[[4-[[(dimethylamino)carbonyl]oxy]phenyl]amino]carbonyl]-, 1,1-dimethylethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



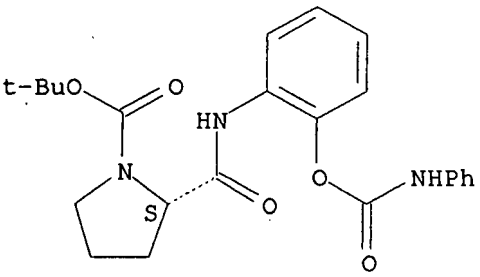
RN 102284-33-3 CAPLUS
CN 1-Pyrrolidinecarboxylic acid, 2-[[[4-[[[(1-methylethyl)amino]carbonyl]oxy]phenyl]amino]carbonyl]-, 1,1-dimethylethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



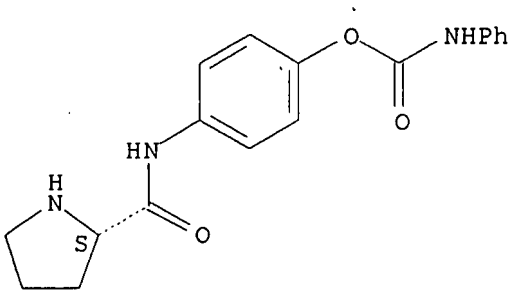
RN 102284-34-4 CAPLUS
CN 1-Pyrrolidinecarboxylic acid, 2-[[[2-[[(phenylamino)carbonyl]oxy]phenyl]amino]carbonyl]-, 1,1-dimethylethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **102284-36-6P 102284-37-7P 102284-38-8P 102284-39-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and peptide coupling of, with (methoxycarbonyl)propionyl dipeptide)
RN 102284-36-6 CAPLUS
CN 2-Pyrrolidinecarboxamide, N-[4-[[(phenylamino)carbonyl]oxy]phenyl]-, monohydrochloride, (S)- (9CI) (CA INDEX NAME)

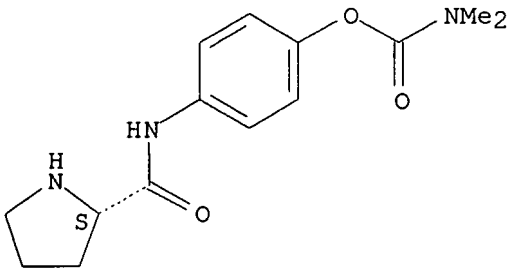
Absolute stereochemistry.



● HCl

RN 102284-37-7 CAPLUS
CN Carbamic acid, dimethyl-, 4-[(2-pyrrolidinylcarbonyl)amino]phenyl ester, monohydrochloride, (S)- (9CI) (CA INDEX NAME)

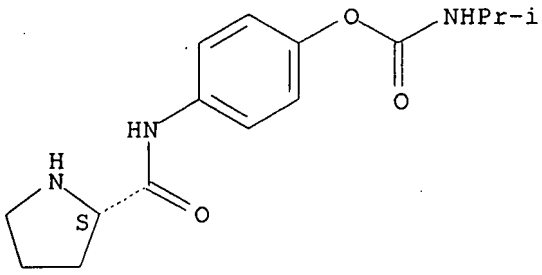
Absolute stereochemistry.



● HCl

RN 102284-38-8 CAPLUS
CN Carbamic acid, (1-methylethyl)-, 4-[(2-pyrrolidinylcarbonyl)amino]phenyl ester, monohydrochloride, (S)- (9CI) (CA INDEX NAME)

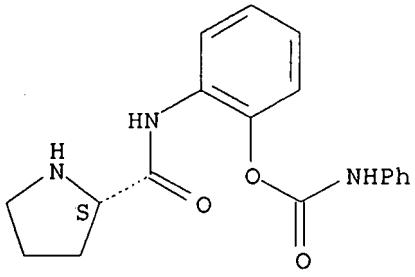
Absolute stereochemistry.



● HCl

RN 102284-39-9 CAPLUS
CN 2-Pyrrolidinecarboxamide, N-[2-[[(phenylamino)carbonyl]oxy]phenyl]-, monohydrochloride, (S)- (9CI) (CA INDEX NAME)

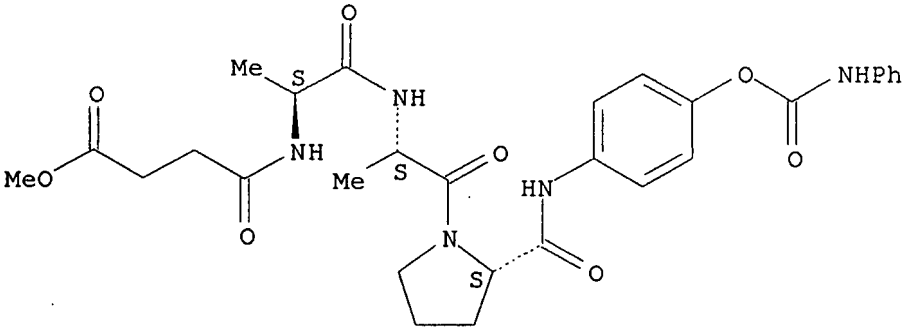
Absolute stereochemistry.



● HCl

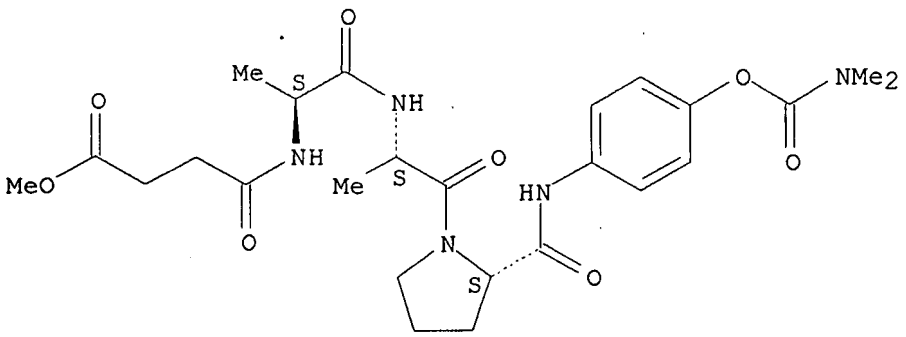
IT **92279-27-1P 92279-28-2P 92279-29-3P**
92279-30-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 92279-27-1 CAPLUS
CN L-Prolinamide, N-(4-methoxy-1,4-dioxobutyl)-L-alanyl-L-alanyl-N-[4-[[(phenylamino)carbonyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



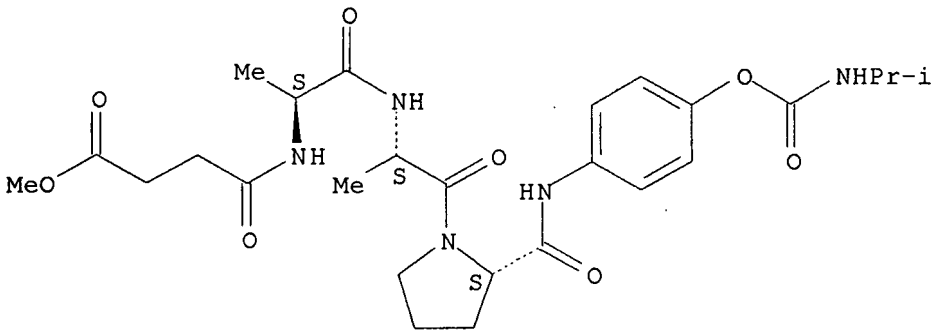
RN 92279-28-2 CAPLUS
CN L-Prolinamide, N-(4-methoxy-1,4-dioxobutyl)-L-alanyl-L-alanyl-N-[4-[[(dimethylamino)carbonyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 92279-29-3 CAPLUS
CN L-Prolinamide, N-(4-methoxy-1,4-dioxobutyl)-L-alanyl-L-alanyl-N-[4-[[[(1-methylethyl)amino]carbonyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 92279-30-6 CAPLUS
CN L-Prolinamide, N-(4-methoxy-1,4-dioxobutyl)-L-alanyl-L-alanyl-N-[2-[[(phenylamino)carbonyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.